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DOCUMENT-IDENTIFIER: US 6498982 B2

TITLE: Methods and apparatus for displaying a travel route and/or generating a list of places of interest located near the travel route

DATE-ISSUED: December 24, 2002

INVENTOR-INFORMATION:

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APPL-NO: 09/901082 [PALM]
DATE FILED: July 10, 2001

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATIONS This application is a continuation of U.S. Ser. No. 08/069,161, filed May 28, 1993, which is allowed. This application is now an issued patent, U.S. Pat. No. 6,282,489, dated Aug. 28, 2001.

INT-CL-ISSUED: [07] G01 C 21/26

US-CL-ISSUED: 701/202; 701/208, 701/209, 701/201
US-CL-CURRENT: 701/202; 701/201, 701/208, 701/209

FIELD-OF-CLASSIFICATION-SEARCH: 701/200, 701/201, 701/208, 701/209, 701/210, 701/211, 701/202, 340/988, 340/990, 340/995, 340/947, 340/954, 73/178R
See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4301506	November 1981	Turco	701/117
☐	4528552	July 1985	Moriyama et al.	340/525

☐	4546439	October 1985	Esparza	701/202
☐	4570227	February 1986	Tachi et al.	701/202
☐	4646089	February 1987	Takanabe et al.	340/995
☐	4734863	March 1988	Honey et al.	701/207
☐	4764873	August 1988	Libby	701/301
☐	4796189	January 1989	Nakayama et al.	701/209
☐	4866626	September 1989	Egli	701/207
☐	4876651	October 1989	Dawson et al.	701/200
☐	4890104	December 1989	Takanabe et al.	340/995
☐	4914605	April 1990	Loughmiller, Jr.	345/649
☐	4926336	May 1990	Yamada	701/202
☐	4937753	June 1990	Yamada	701/209
☐	4954958	September 1990	Savage et al.	701/202
☐	4962458	October 1990	Verstraete	701/200
☐	4984168	January 1991	Neukrichner et al.	701/210
☐	5031104	July 1991	Ikeda et al.	701/209
☐	5041983	August 1991	Nakahara et al.	701/209
☐	5067081	November 1991	Person	701/205
☐	5115399	May 1992	Nimura et al.	701/208
☐	5168452	December 1992	Yamada et al.	701/202
☐	5170353	December 1992	Verstraete	701/202
☐	5172321	December 1992	Ghaem et al.	455/456
☐	5189430	February 1993	Yano et al.	342/457
☐	5191406	March 1993	Brandestini et al.	348/111
☐	5191532	March 1993	Moroto et al.	701/201
☐	5231584	July 1993	Nimura et al.	701/202
☐	5270937	December 1993	Link et al.	701/209
☐	5274387	December 1993	Kikihara et al.	340/995
☐	5293163	March 1994	Kakihara et al.	341/995
☐	6084882	July 2000	Ogura et al.	340/2.6
☐	6282489	August 2001	Bellesfield et al.	701/201

OTHER PUBLICATIONS

B. Singh et al.; "Introduction to Data Structures"; pp. 215-223; 1985; West Publishing of Minnesota.
U.S. Geological Survey Professional Paper; "Map Projections--A Working Manual"; 1987; U.S. Department of Interior.

ART-UNIT: 3661

PRIMARY-EXAMINER: Louis-Jacques; Jacques H.

ATTY-AGENT-FIRM: Fish & Richardson P.C.

ABSTRACT:

An automated travel planning apparatus includes three separate databases, including a map database for storing bit-mapped images covering numerous geographic regions, a routing database for storing node, link, and shape data for roads geographically located within the geographic regions and for storing place data indicating the geographic location of places such as towns and cities, and a places of interest database containing the geographic locations of numerous places of interest. A processor within the automated travel planning apparatus may be divided into several functional components, including a map selection component, a routing component, and a place selection component. In response to user input at the user interface, the map selection component chooses a bit-mapped image from the map database for display on the display monitor. After a user selects, via the user interface, a departure point and a destination point, the routing component employs the routing database to generate and display a route between the selected departure and destination points. If the user requests a list of places near the displayed route, the place selection component employs the places of interest database to generate and display a list of places of interest which are within a predetermined distance of the generated route.

14 Claims, 11 Drawing figures

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